DNspector™ Quick Start Guide

Use this Quick Start Guide to quickly and easily install your DNspector in your system. Follow the instructions below.

1. Installing DNspector

1. Put the install disk in the CD drive. It will **Auto Play** the install program. Follow the instructions. You may put DNspector anywhere on your disk drives. The default is drive **C:\Program Files\Western Reserve Controls**. You must retain the **\Western Reserve Controls** folder to insure proper operation of the installer, but this program *doesn't* have to be in the **\Program Files** folder if you are installing it on a disk other than **C:**. You can also just change the <u>drive letter</u> to the desired drive and leave the rest of the path alone.
2. When the install is finished, exit the installer and leave the install disk in the drive.
3. Plug in the dongle into a **USB** port.
4. The system will detect New Hardware and that will bring up the first driver installer. Select **Find the Driver Automatically**. This will cause the New Hardware installer to search the CD, which contains all the drivers necessary to run the dongle.
5. When this installer is done exit it and almost right away a second installer will appear. Follow the same procedure as #4.
6. Exit this installer, and your Dnspector is ready to operate.

2. Getting Started with DNspector

1. Plug the DeviceNet connector of the dongle into the DeviceNet system. The scanner, the PLC or another computer should NOT be running and talking while trying to manipulate any devices on line with DNspector.

2. Open DNspector by double clicking the WRC icon.

3. Go to the Network menu item and select it. The dropdown will show Connect, then Setup. Click on Setup. You may set the baud rate here along with the Master MacID, and the Monitor MacID.

4. DNspector will remember the data and setting of each feature and also where the dialogs pop up.

5. The Text screen has headers to show different parts of the messages.

6. **Line** – Line number

7. **Src** – Internal (int) for messages generated by DNspector. External (ext) for all others

8. **D H M S Ms** – **D**ays, **H**ours, **M**inutes, **S**econds, **M**illi-**s**econds

9. The Master MacId should be set to the MacID used by the scanner. The Master MacID on DeviceNet networks normally is set to zero (0). Make the Monitor MacId any value not used by any other devices on the network. Close the menu item.

10. You are now ready to connect. Press the **Connect** button. DNspector will attempt to connect to the network. If it fails, check the network to be sure it is terminated correctly. You need 2-120 ohm resistors across the 2 inner lines of the Phoenix 5 pin connector at each physical end of the network for the network to function within the CAN specifications. If the dongle doesn't respond, try switching to another USB connector, or just pull the USB connector out long enough to get an indication that the system sees the USB hardware is no longer there, then simply plug it back in.

11. In some cases you must restart the computer after installiation to allow the drivers to function correctly.

12. Once you have connected, you should Browse The Network. Press the Browse Net button and you will see the DNspector scan the entire network to identify what units are there and their basic idenity and connection sizes. Once the scan is done, you may go to the Network Menu item and select Device Configuration View. This will show a box with the MacIds of all the units on line. Click on the plus (+) to expand and show the identity attributes and connection data sizes of the unit. This is how the DNspector knows how to treat fragmented messages when monitoring the network activity.

13. To send messages to any unit on the network, press the Send Message button. This dialog is tabbed with the different types of messaging commonly used on DeviceNet. To allocate, click on the Allocate tab. In the Allocate Choices box, select at least the explicit message, and most of the time the poll message is also selected. Put the MacId into the MacId box then press Send. You will see on the main screen the allocate message going out to the device. The device should respond back and its NetLed will go solid GREEN. This means it is connected to the DNspector. You may now click on the explicit message tab and construct an Explicit message to the device. You will need to know the service (usually get or set single attribute, or reset), Class, Instance and Attribute you wish to read or write.

14. To watch what is going on while any DeviceNet activity is ongoing, simply click on the Start Capture button. The Capture message count should be increasing if any messages are on the network. Press Stop Capture to stop and display the most recent messages. Scroll up to see earlier messages.

15. To keep a record of the ongoing DeviceNet message traffic, go to the Log menu item, click on it, then select Setup. This allows you to give a name and storage location for your log files. Once named, OK out of the dialog and press Start Log button. The log count will appear to start counting if there is ongoing message traffic. This log can be as long a necessary, since the system uses multiple log files of up to 3 million messages each for as long as there is disk space to hold them. No data is missed between files. Since each of the logfiles is automatically created, it is time stamped when it is created. The quanity of messages is settable from 1 to 3 million per file. This technique allows more portable file sizes than one huge file.